

**Commonwealth of Kentucky  
Division for Air Quality**

**PERMIT APPLICATION SUMMARY FORM**

Completed by:  
Frough Sherwani

GENERAL INFORMATION:

Name: Dana Light Axle manufacturing, LLC  
Address: 10000 Business Boulevard  
Dry Ridge KY 41035  
Date application received: January 23, 2008  
SIC/Source description: 3714 /Motors Vehicle parts & Accessories  
AFS (10-digit) Plant ID: 21-081-00019  
AI #: 4255  
Activity Number: APE20080001  
Permit number: F-06-012 R2

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input checked="" type="checkbox"/> Permit modification	<input checked="" type="checkbox"/> Conditional major
__Administrative	<input type="checkbox"/> Title V
<input checked="" type="checkbox"/> Minor	<input type="checkbox"/> Synthetic minor
__Significant	<input type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input checked="" type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input checked="" type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/> Not a major modification per 401 KAR 51:017, 1(23)(b) or 51:052 1(14)(b)	

MISCELLANEOUS:

☐ Acid rain source  
☐ Source subject to 112(r)  
☒ Source applied for federally enforceable emissions cap  
☐ Source provided terms for alternative operating scenarios  
☐ Source subject to a MACT standard  
☐ Source requested case-by-case 112(g) or (j) determination  
☐ Application proposes new control technology  
☒ Certified by responsible official  
☒ Diagrams or drawings included  
☐ Confidential business information (CBI) submitted in application  
☐ Pollution Prevention Measures  
☐ Area is non-attainment (list pollutants):

**EMISSIONS SUMMARY:****Existing Source (F-06-012R2):**

<b>POLLUTANT</b>	<b>POTENTIAL EMISSIONS (TPY)</b>	<b>ALLOWABLE EMISSION (TPY)</b>
Particulate Matter (PM/PM <sub>10</sub> )	80.86	10.34
VOC	369.96	90*
Sulfur Dioxide (SO <sub>2</sub> )	0.0711	NA
Nitrogen Oxides (NO <sub>x</sub> )	12.17	NA
Carbon Monoxide (CO)	10.223	NA
Methanol	0.0898	NA
Toluene	12.06	9.0**
Ethylene Benzene	0.3914	NA
Xylene	1.4631	NA
Hexane	0.0613	NA
Triethylamine	2.71	NA
MEK	0.3085	NA
Ethylene Glycol	0.4971	NA
<b>Combined HAPS</b>	17.708	22.5**

**New Construction (Revision 3):**

<b>POLLUTANT</b>	<b>POTENTIAL EMISSIONS (TPY)</b>	<b>ALLOWABLE EMISSION (TPY)</b>
Particulate Matter (PM/PM <sub>10</sub> )	30.5	NA
VOC	94.14	NA

**Source Wide after construction (F-06-012R3):**

<b>POLLUTANT</b>	<b>POTENTIAL EMISSIONS (TPY)</b>	<b>ALLOWABLE EMISSION (TPY)</b>
Particulate Matter (PM/PM <sub>10</sub> )	111.36	10.34
VOC	464.1	90*
Sulfur Dioxide (SO <sub>2</sub> )	0.0711	NA
Nitrogen Oxides (NO <sub>x</sub> )	12.17	NA
Carbon Monoxide (CO)	10.223	NA
Methanol	0.0898	NA

POLLUTANT	POTENTIAL EMISSIONS (TPY)	ALLOWABLE EMISSION (TPY)
Toluene	12.06	9.0**
Ethylene Benzene	0.3914	NA
Xylene	1.4631	NA
Hexane	0.0613	NA
Triethylamine	2.71	NA
MEK	0.3085	NA
Ethylene Glycol	0.4971	NA
<b>Combined HAPS</b>	17.708	22.5**

\* The source has accepted a facility-wide limit on annual VOC emission to no more than 90 tons. The actual VOC emissions shall be calculated based on 12-month rolling total.

\*\* The source has accepted a facility-wide limit on annual single HAP emissions to no more than 9.0 tons and combined HAPS 22.5 tons. The actual HAPS emissions shall be calculated based on 12-month rolling total

### **SOURCE DESCRIPTION:**

The DANA Torque-Traction Technology, Inc assembles lightweight vehicle axles used in vans, trucks, and sport utility at its facility at 10000 Business Blvd, Dry Ridge (Grant County), Kentucky. The source is a minor source, which is registered with the Division pursuant to 40 KAR 52:070

The source operates several assembly lines, some of which have no air emissions. As part of some lines, the source paints the axles to inhibit corrosion during normal use. The source is currently operating four assembly lines that include painting as part of the process. The lines (200, 300, 400) use a water based coating that contains low levels of VOC. A fourth line (line 100) uses a VOC based coating. The source's current potential-to-emit calculations are well below major source thresholds, and the source is therefore a registered minor source. The source is planning an expansion of plant by incorporating four new process lines which are currently located at the source's Buena Vista, Virginia. These new lines will include paints booth that uses a VOC based –coating, as a result the source's potential-to-emit will exceed 100 tons per year of both VOCs and particulate matter, and 10 tons per year of for toluene (HAP). Operating records from Buena Vista plant indicates that actual emissions are below major source thresholds.

Therefore, On February 7, 2006, the source has applied to the Division for the conditional major permit.

### **MINOR PERMIT REVISION 3: INSTALLATION OF TOUCH UP SPRAY GUNS.**

On January 23, 2008, the Division received an application from the source for a minor revision to their conditional major permit F-06-012 R2.

There are six lines currently operating at the facility. The source is proposing to add a

touchup spray guns to Emission Point # 2 (Line 200), Emission Point # 3 (Line 300), and Emission Point # 9 (Line 975). Emissions from the touchup operation will be fugitive into the plant. The axles will be air-dried.

On February 15, 2008, the Division received a name change application from “DANA Torque-Traction Technology, Inc” to “Dana Light Axle manufacturing, LLC”.

The current source wide emission limitations for VOC is 90 tons per rolling 12-month period, 9 and 22.5 tons per rolling 12-month period for single and combined HAPs respectively. These limitations will remain the same.

## **MINOR PERMIT REVISION 2: INSTALLATION OF TOUCH UP SPRAY GUNS**

On October 9, 2007, the Division received an application from the source for a minor revision to their conditional major permit F-06-012 R1.

There are six lines currently operating at the facility. The source is proposing to add touchup spray guns to these six lines to eliminate the use of aerosol cans. There will be one gun used outside each paint booth area on Emission Point # 1(Lines 100), Emission Point # 2 (Line 200), Emission Point # 3 (Line 300), Emission Point # 5 (Line 400), Emission Point #6 (Line 500R) and Emission Point # 8(Line 950).

The Emission Point # 1(Lines 100), previously used a VOC-based coating (NPCA 1-84). The line currently uses a VOC-based coating (United Paint Black W/R Primer HW66-8713). This same paint will be used for the touch up operation.

Paint Lines 200, 300, 400, 500R and 950 will continue to be permitted using the VOC-based coating (Wilko 316.01). This same paint will be used for the touch up operation on these lines.

Emissions from the touchup operation will be fugitive into the plant. The axles will be air-dried.

The facility has also made a change to the paint gun cleaner. The new paint gun cleaner is Super 16 Paint Gun Cleaner.

The current source wide emission limitations for VOC is 90 tons per rolling 12-month period, 9 and 22.5 tons per rolling 12-month period for single and combined HAPs respectively. These limitations will remain the same.

## **MINOR PERMIT REVISION 1: INSTALLATION OF SPRAY BOOTHS**

### **Revision 1 (Minor Revision):**

On May 18, 2007, the source submitted a minor revision application to their conditional major permit F-06-012.

The source currently operates several assembly lines. As part of some lines, the facility paints

paints the axles to inhibit corrosion during normal use. The plant is currently operating two flow coating lines (200 and 300) and four paint booths (100, 400, 500R, and 950). The source installed the latter lines as a part of a plant expansion in 2006.

The current source wide emission limitations for VOC is 90 tons per rolling 12-month period, 9 and 22.5 tons per rolling 12-month period for a single and combined HAPs respectively. These limitations will remain the same.

The source is proposing to remove two flow coater operations (Line 200 and 300) and replacing them with two (2) paint booths. Also, Line 600, that was a part of the original install, was never installed. However, this paint booth is now being installed in Line 300. The Line 300 upgrade is planned for mid May and the Line 200 install is planned for October 2007.